

Superbrain Yoga in Children with Autism and ADHD

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Working with severely disabled and autistic children has been both exciting and challenging, but has also been undoubtedly a rewarding experience. I have learned so much from my students and cherish the wealth of knowledge I gained from our daily interactions. It is truly frightening the rise in the number of children with various disabilities over the past couple of years, especially autism and ADD/ADHD. New research has shown that the prevalence of the autistic spectrum disorder has risen to 1 out of every 150 children. It is believed that 5-20% of all school age children have ADD/ADHD, which is 1 out of 8 children. Dyslexia is also on the rise, 1 out of every 20 children. These children display a range of symptoms but commonly are unable to communicate and express their wants and needs like ordinary children. Can you imagine having to say something but unable to relay it~ No one knows what you are feeling! No one knows what you are thinking! What would you do! These children respond and relate to the world much differently. A soothing song may sound like a screeching siren. A light

embrace or the feeling of clothes on their skin may feel like a thousand razors. Their sensory systems are constantly in a fight or flight mode. Simple daily activities we take for granted, such as food shopping, may leave them feeling overwhelmed and lost. They don't know how to communicate their feelings so they may completely shut down or respond negatively, maybe even aggressively. Parents, teachers, and therapists are always looking for new and innovative ideas to help these children. Super Brain Yoga has been introduced to many of my student's parents and colleagues working with developmentally delayed and disabled children. In just a short period of time, the results have been very promising and rewarding to all the participants in the study. Many testimonials are made by the teachers, therapists, and parents using this exercise and the overall observations include: improved emotional states, improved focus and attention, improved social skills, sensory regulation and modulation and improved memory. Using the

Developmental Test of Visual Perception-2, the study has shown that the children completing the exercise on a regular basis show dramatic improvement in areas combining vision, perception and motor output.

Monitoring progress is a challenge. Master Choa Kok Sui said truth should be both qualitative and quantitative. We monitored progress through the use of skilled observation and the DTVP-2 (Developmental Test Visual Perception), a standardized battery of tests measuring visual-perception and visual-motor abilities. It was completed before starting the study and after seven months and again one year later of completing Super Brain Yoga at least five days a week, twice daily. Significant behavioral changes were noted through teacher, therapist and parent observation. The results are quite astounding and the following are some case studies conducted.

CASE STUDY #1: AUTISM

MT is an autistic 6-year old twin boy attending a special education school. He is very sensory seeking and aggressive, displaying behaviors such as biting, hitting, head butting, pinching, chinning, screaming, crashing into people and objects and constantly engaging in sexual seeking behaviors. He is unable to sit for longer than five minutes without engaging in one or many of these behaviors. MT's parents have been frustrated and overwhelmed since their son was an infant, because he was unable to sleep through the nights without waking up frequently and having difficulty calming down. Following regular Superbrain Yoga, in less than three weeks, he started sleeping better and after one year of completing this he slept

TABLE 1: DTVP-2 RESULTS:

Subtest	Raw Scores									
	Age Equivalent		Percentile		Before		7 months		1 year	
1 year										
Eye Hand Coordination										
140	158	170	5y 10m	7y 6m	9y 8m	25%	50%	63%		
Copying	18	25	29	6y 0m	7y 9m	9y 1m	25%	50%	50%	
Spatial Relations	18	31	36	5y 3m	6y 4m	7y 1m	9%	16%	16%	
Visual Motor Speed	0	14	19	<3y 11m	8y 7m	10y 11m	1%	63%	75%	

TABLE 2: DTVP-2 RESULTS

Subtest	Raw Scores		Age Equivalent		Percentile	
	Before	7 months	Before	7 months	Before	7 months
Eye Hand Coordination						
Copying	113	151	4y 9m	6y 6m	25%	50%
Spatial Relations	14	25	5y 3m	7y 9m	37%	75%
Visual Motor Speed	15	40	5y 1m	9y 7m	37%	95%
Visual Motor Speed	3	10	4y 9 m	7y 2m	37%	75%

through the nights with no disruptions. His parents could not believe that such a simple exercise could be the cause of this sudden change. In not believing in the effects of the method, they decided to stop the exercise. The following few days proved challenging for MT's parents, as he reverted back to his old patterns and was unable to sleep, becoming irritable and overly sensitive. Imagine a child who does not socialize, does not make eye contact, does not show love to his parents like ordinary children. This child would not even play with his own twin brother. After completing Superbrain Yoga consistently, this same child is one who expresses his love and emotions to his parents by regularly looking into their eyes and holding the gaze, kissing and hugging them; something they always wished and hoped for. He is playing appropriately with his toys and using this as a tool to express his needs and is even beginning to seek out his twin brother for companionship. Before starting Super Brain Yoga, this child was unable to sit for longer than five minutes, but now he is able to sit and attend for 45 minutes with little to no self-stimulatory behaviors or overreactions. His overall attention and concentration has improved and he is engaging in more age appropriate activities.



CASE STUDY #2: ADHD AND PDD

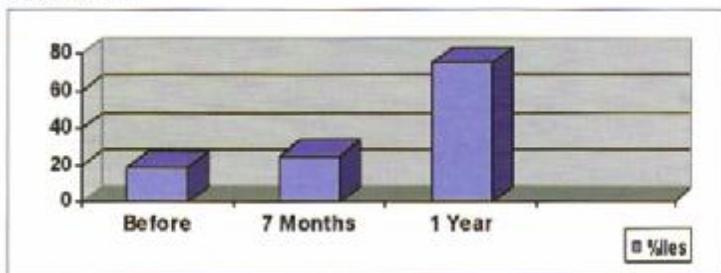
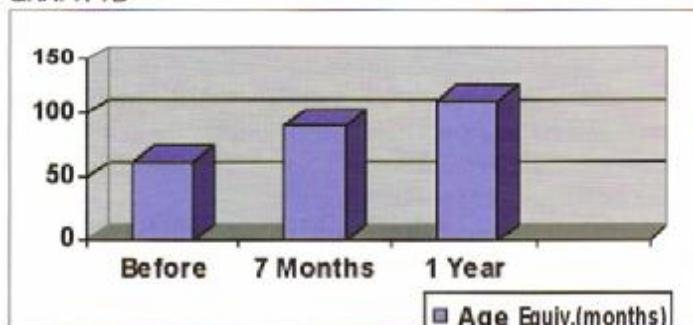
RT is a seven year-old boy with a diagnosis of attention deficit/ hyperactivity disorder and pervasive developmental disorder. He is extremely hyperactive and is always engaging in some sort of self-stimulatory behavior, such as, hand flapping, running, jumping, spinning or talking to himself. His impulsivity, hyperactivity, and distractibility impact all

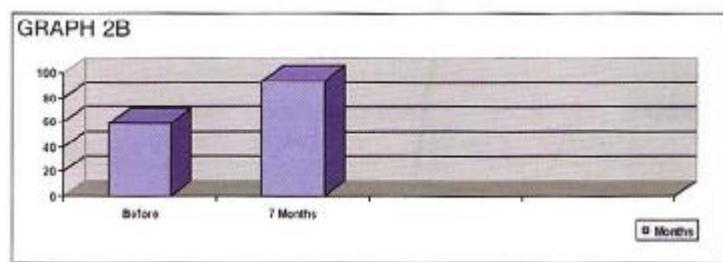
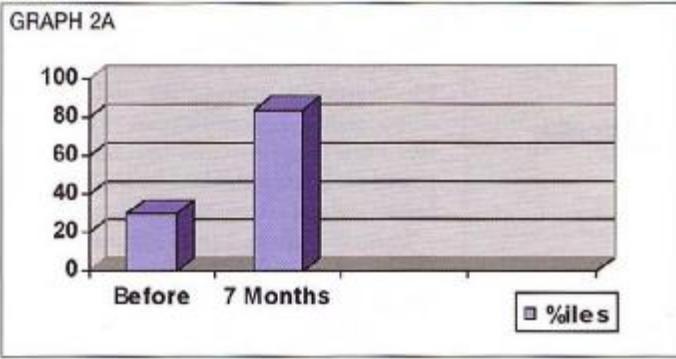
aspects of his life. He is in a self-contained classroom geared for helping children with sensory, behavioral and learning problems. Imagine touching a child softly and the child reacting to the input by throwing himself on the floor. The slightest input will push this child over the edge. He is unable to sit at a table for more than five to seven minutes without constantly moving or crashing to the floor. He is unable to walk across the room without running, jumping, spinning and crashing into objects.

Following regular Superbrain Yoga exercises, he appears calmer and more focused. He is able to engage in an entire therapy session, for about 30 minutes, with little to no behaviors. He is able to walk through the hallways without running, jumping, spinning or crashing. He sits and attends in class, displays improved social skills and expressing his feelings to his classmates and teachers.

Since RT has started school, his sensory behaviors have gotten in the ways of his schoolwork and no one knew the abilities he possessed. One day after completing Superbrain Yoga, he got up and walked across the room to the blackboard. There he read all the words on the board!

Secondary to his increased arousal state and inability to regulate and calm himself RT never truly expressed his strengths. Now after one year of regular Superbrain Yoga he is mainstreamed into the regular education classroom for part of the day and he is succeeding.

GRAPH 1A**GRAPH 1B**



Looking at his overall DTVP-2 results R.T. has made a huge improvement in all visual-motor integration subtests. Most improvement was seen in the area of Visual-motor Speed. He began in the first percentile, but gradually moved to the 75% percentile (See table 1A). He began this study in the 5th percentile of children his age and by the time the DTVP-2 was given 1 year later, he had moved to the 50th percentile (see graph 2A). That is ten times higher than when he started. He made an overall improvement of 3 years and nine months in only one year with the use of regular Superbrain Yoga (See graph 2B).

CASE STUDY #3: DYSLEXIA AND ED

JT is MT's twin brother and unlike his brother, he is in regular school. He has been diagnosed with dyslexia and found to be emotionally disturbed. Controlling his emotions is quite difficult for him and he would have regular emotional outbursts and tantrums of screaming and crying, often becoming angry. Since starting Superbrain Yoga, he has not had one! It was difficult to get him to do anything because of his low frustration tolerance, but now he tries new and challenging activities with confidence. With his disability, schoolwork was challenging, frequently drawing letters backwards, difficulty copying simple shapes and recognition of letters were poor. Given the diagnosis of dyslexia, you would believe JT would be having extreme difficulty reading, but that just isn't so. Now not only does he know and write all of his letters but he is reading with ease. His teacher has actually noted that he is one of the best students in the classroom and is so pleased with his progress.

Graph 2A: Composite Percentiles Graph

TABLE 3: DTVP-2 RESULTS

Subtest	Raw Scores		Age Equivalent		Percentile			
	Before	7months	1 year	Before	7 months	1 year	Before	7 months
Eye Hand Coordination								
143	150	157	5y 11m	6y 3m	9y 0m	25%	25%	50%
Copying	24	34	34	7y 5m	11y 2m	11y 2m	50%	91% 84%
Spatial Relations	37	40	43	7y 4m	9y 7m	11y 2 m	50%	75% 91%
Visual Motor Speed	0	7	9	<3y 11m	5y 6m	6y 11m	1%	16% 25%

2B: Composite Age Equivalents

Looking at his overall DTVP-2 results J.T. has made a huge improvement in all visual-motor integration subtests. Most improvement was noted in spatial relations. He began in the 37th percentile, but gradually moved to the 75th percentile (see table 2). He began this study in the 30th percentile of children his age and by the time the DTVP-2 was given 7 months later, he had moved to the 84th percentile (graph 2A). That is almost three times higher than when he started. He made an overall improvement of two years and 10 months in only seven months with the use of regular Superbrain Yoga (see graph 2B).

CASE STUDY #4: TBI AND ADD

BC is a 7 year-old boy with the diagnosis of attention deficit disorder and traumatic brain injury. He was born with enlarged ventricles and missing a corpus callosum, the part of the brain connecting the left and

right sides. This is a child struggling with his everyday activities including perception, memory and overall learning, acting out frequently and isolating himself from his classmates and family. He is in a self-contained classroom geared for helping children with behavioral and learning problems. He will frequently refuse to do anything and "tune out" any and all directions, unable to complete simple one-step commands. Since completing Superbrain Yoga regularly, he no longer displays defiant behaviors and is showing an overall improvement in his demeanor and social skills. He frequently seeks out children to play with and seeks out teachers for help and assistance with things that are difficult for him instead of giving up. Multi-step directions are now being followed with little to no help. This student displays difficulty with

retention of new information and for three years has been working on letter, color and shape recognition. Four out of 26 letters was all he could recognize, but now he knows 20 letters consistently, all colors, and all shapes. He displays improved self-esteem; trying new and challenging things.

Graph 3A: Composite Percentiles:

Graph 3B: Composite Age Equivalents:

Without a doubt again, looking at his overall DTVP-2 results B.C. has made a huge improvement in all visual-motor integration subtests. The area where most improvement was seen is the Visual-motor speed subtest. He began in the 1st percentile, but gradually moved to the 25th percentile (See table 3). He began this study in the 16th percentile of children his age and by the time the DTVP-2 was given one year later, he had moved to the 70th percentile (See graph 3A). That is four times higher than when he started. He made an overall improvement of three years and five months in only one year with the use of regular Superbrain Yoga (See graph 3B)

CONCLUSION

With the use of regular Superbrain Yoga, the children are calmer and more focused. Overall improvement is shown in all areas including function and behavior;



"He made an overall improvement of three years and nine months in only one year with the use of regular Super Brain Yoga"

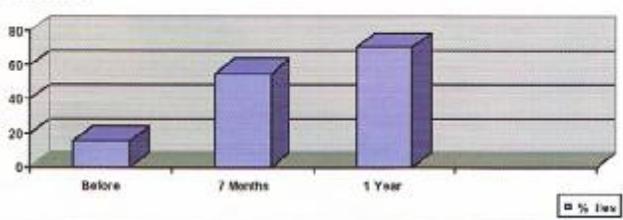
interacting with the environment with more success. Using a standardized test helps to understand the functional improvements made in areas of visual-motor integration and the testimonials from parents and teachers give you a picture of the child's overall demeanor, but nothing speaks louder than the children's behaviors. Often during transitional or unpredictable times of the day, the children requested the exercise in their own individual way. Some children would start holding their ears in the SuperBrain position or even say, Ears! or "SuperBrain!" as if to tell us they need it. During school, some children stood up and started engaging in Superbrain Yoga with no external prompting. This supports the evidence that the

exercise may be calming and organizing for many of the children giving them a sensory tool they can utilize to help regulate and harmonize their own internal arousal states.

In conclusion, all of the children in the study have made dramatic strides in all areas of function. Teachers and parents are in awe that an exercise that takes less than one minute can help a child to make phenomenal strides in such a short time. There have been significant improvements in the sensory processing, visual-perception, visual-motor, speech, language, communication and social behavior in these children.

Super Brain Yoga may be the missing key to unlock the mystery of these children. In four years of working with this population, I have not seen the progress or gains these children have made in only one year. Super Brain Yoga can be a critical component in therapy progress and improvements in overall function and success. This is an easy and quick exercise that will change the lives of these children, teachers, and parents forever.

GRAPH 3A



GRAPH 3B

